REMARKS

In the Office Action, claims 1-6, 8-10, 12-15, and 19-22 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. 6,195,665 to Onodera et a. ("Onodera"). Claims 7, 11 and 16-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Onodera in view of U.S. 6,684,333 to Walker et al ("Walker").

In the present paper, claims 1, 8, 13, and 14 have been amended. No claims have been canceled. Applicant respectfully traverses the Examiner's rejection of claims 1-22 as follows.

Claims 1-11 and 13-19

Each of independent claims 1, 8, 13, and 14 now recites "a plurality of disk files" to which random bits are saved, and from which random bits are made available to users. The recited disk files are not taught by Onodera, which instead teaches random bits being output directly to users from an analog-to-digital converter or other processor (*e.g.*, Figs. 1, 4-6, and 9-11), a buffer (22: 43-49), or a physical medium such as a floppy disk or a CD-ROM (22: 57-61). Nowhere does Onodera teach or suggest the limitations of a plurality of disk files now present in claims 1, 8, 13, and 14. In fact, to the extent that Onodera teaches random bits stored on a physical medium such as a disk, Onodera is wholly silent as to how random bits are stored.

The Specification (9: 11-20) makes clear that the disclosed use of a plurality of disk files is a novel and advantageous feature of the present invention:

> The saved disk files are used to supply random bits to remote users. A given user only receives the number of bits requested, and an open disk file will be used until its contents are exhausted. When empty, the disk file is deleted from memory. If a user request cannot be filled by an open disk file, a subsequent disk file will be opened to provide random bits that were not available in the original open disk file. *Employing disk files enables the random bit server to store and organize random bits in an efficient manner. Using disk files once and then discarding them ensures that the same random bit is not used twice. Additionally, if it is determined that some bits within a disk file are corrupted, the disk file can be discarded without slowing down the response time of the random bit server 100.* (Emphasis added.)

Thus, not only are claims 1, 8, 13, and 14 distinguishable from the prior art of record, but the claimed invention presents unique advantages that are neither taught nor suggested in the prior art. It is respectfully submitted that these unique advantages, as disclosed in

Applicant's Specification, are further evidence that claims 1, 8, 13, and 14 are patentable over the prior art of record.

Further, Walker clearly does not teach the recited plurality of disk files inasmuch as Walker's invention is directed toward a networked billing system and has nothing to do with the generation or distribution of random bits. (*See, e.g.*, Abstract.)

At least for the foregoing reasons, claims 1, 8, 13, and 14 are in condition for allowance, as are claims 2-7, 9-11, and 15-19 which depend respectively from claims 1, 8, and 14.

Claim 12

Independent claim 12 recites, among other limitations, "a first random number source generating a first random data stream" and "a second random number source generating a second random data stream." Claim 12 further recites "an interface to the first random number source for receiving the first random data stream and the second random data stream, the interface outputting a random bit stream." The Examiner contends that Onodera teaches these claim limitations. However, a careful reading of Onodera fails to support the Examiner's contention with respect to any of the afore-mentioned limitations.

The Examiner (*see* Office Action, page 4) apparently believes that the recited first and second random number sources are taught by Onodera's disclosure that "Noise signal 102 is output from a connection point of resistor 704 and transistor 703 by utilizing thermal noise of transistor 703 generated at both ends of resistor 704." (14: 27-30.) However, this statement is preceded by Onodera's explanation that what is being described is "one example of *a noise source* in a physical random number generator." (14: 15-16, emphasis added; *see also* 14: 18.) The mere fact that a noise source utilizes noise generated at both ends of a resistor does not change the fact that Onodera teaches only a single noise source. Onodera's teaching is confirmed by Figure 13, which clearly depicts a single noise source 101 producing a single noise signal 102.

The Examiner also apparently believes that the recited first and second random number sources are taught by Onodera's disclosure of a "noise source 101 [that] utilizes a photomultiplier and as shown in FIG. 15, it is composed of a photomultiplier 801, bias applying resistors 806, 807 and 808 and a high voltage power source 809." (15: 11-14.) However, this statement clearly describes use of only a single noise source. Further,

Onodera's Figure 15, like Onodera's Figure 13, clearly depicts a single noise source 101 and a single noise signal 102. Again, the fact that a noise source may have multiple components has no bearing on whether Onodera teaches using a plurality of noise sources, regardless of how many components a particular noise source contains. Onodera simply offers no teaching or suggestion to use a first random number source and a second random number source supplying a data stream to an interface. Onodera teaches at most using a single noise source.

Claim 12, in contrast to the cited prior art, clearly recites distinct first and second random number sources whose data streams are received by an interface that outputs a random bit stream. As explained by the Specification and drawings, certain embodiments of the present invention use a plurality of random number sources 402 generating random data streams received by a network interface 442 or computer interface 432. (Fig 4; *see also* Specification, 14: 23 – 15: 12.) As depicted in Figure 4, these random number sources 402 clearly generate distinct random data streams, or what in Onodera's nomenclature would be noise signals. Thus, in reciting the use of first and second random number sources, the invention as recited in claim 12 is clearly distinguishable from Onodera, which teaches at most use of one random number source.

For at least the foregoing reasons, claim 12 is in condition for allowance.

Claims 20-22

Independent claim 20 recites in part

> *a display device communicatively coupled to the computer, the display device comprising:*
> *a first window for displaying information about a random bit stream awaiting distribution over a network;*
> *a second window for displaying diagnostic information regarding the random bit stream; and*
> *a window manager for controlling the layout of, and communication of data to, the first window and the second window while present for viewing on the display device.*

The Examiner contends (Office Action, page 5) that Onodera teaches all of the limitations of claim 20, including those quoted above. However, Onodera actually teaches against the display of information in first and second windows because Onodera teaches the display of at most one piece of information at a time – a single random number. (*See* Fig. 19.) In fact, Onodera fails to teach or suggest displaying any data in a window, in addition to failing to disclose any of the limitations of "displaying information about a random bit stream awaiting

distribution over a network" or "displaying diagnostic information regarding the random bit stream". Certainly Onodera does not disclose displaying information in first and second windows. Further, Onodera contains absolutely no teaching or suggestion regarding the window manager recited in claim 20.

Onodera teaches at most displaying a random number generated by the disclosed random number generating circuit 100. (Fig. 19.) Indeed, the portion of Onodera cited by the Examiner makes quite clear that the scope of Onodera's disclosure is very definitely limited to the display of random numbers: "Display processor 1101, under the control of a control panel 1104, based on inputted random number data 106 outputs display data 1102 to display unit 1103." (17: 56-58.) Thus, Onodera's Figure 19 clearly depicts the display of a random number, and nothing more. Onodera's disclosure is therefore irrelevant to claim 20, which does not recite the display of a random number.

With respect to "displaying information about a random bit stream awaiting distribution over a network", Applicant's Specification (17: 12-16) clearly supports this claim limitation by disclosing that

> The right portion of operator screen 600 contains a disk file status sub window 612. The disk file status sub window 612 contains information about available disk files containing random bits. The disk file status sub window 612 provides the operator with information regarding the quantity of tested random bits available to users.

(*See also* Fig. 6.) It is therefore clear that the recited display of information *about a random bit stream* is totally different than the display of a random number taught by Onodera. Moreover, nothing in Onodera's display of a random number even hints at Applicant's recitation of "displaying information about a random bit stream awaiting distribution over a network".

With respect to "displaying diagnostic information regarding the random bit stream", the Examiner contends (Office Action, page 5) that this limitation is taught by the following portion of Onodera: "For instance, a case to generate numbers of a die in terms of random numbers is considered. First, the random number generating function is changed over to the die mode with four buttons provided on control panel 1104." (18: 10-14.) Clearly, this portion of Onodera is wholly irrelevant to the recited display of diagnostic information regarding the random bit stream. Rather, Onodera here appears to be teaching the display of random numbers meant to represent the faces of a six-sided die. Onodera's disclosure is not

even remotely related to the display of diagnostic information about a random bit stream as disclosed (Specification, 17: 19-27; Fig 6, block 602) and recited in claim 20.

Further, Applicant can find no portion of Onodera that even remotely teaches or suggests display of information in a window, much less the window manager recited in claim 20. Moreover, claim 20 clearly recites that the window manager controls the layout and communication of data to both the first and second windows "while present for viewing on the display device." Onodera, on the other hand, discloses the display of one piece of information at a time – a single random number. (*See* Fig. 19.) Thus, not only does Onodera fail to teach the recited window manager, but one of ordinary skill in the art would have had no reason to implement a window manager in the context of Onodera's disclosure because Onodera fails to teach displaying its random number in a single window, much less first and second windows controlled by a window manager.

For at least the foregoing reasons, claim 20 is in conditions for allowance, as are claims 21 and 22, each depending from claim 20.

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CONCLUSION

Applicant respectfully submits that all pending claims are distinguished over the cited prior art and are in condition for allowance. If the Examiner has any questions or issues relating to Applicant's response, he is encouraged to telephone the undersigned representative.

Any fees associated with the filing of this paper should be identified in an accompanying transmittal. However, if any additional fees are required in connection with the filing of this paper, permission is given to charge Deposit Account No. 07-2347. To the extent necessary, a petition for extension of time under 37 C.F.R. § 1.136 is hereby made, the fee for which should be charged to the foregoing deposit account number.

Respectfully submitted,

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